

Course: AI Planning  
 Date: 30.10.2014  
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## 1.1 Exercise 1.1

	districts	landing platforms	boys
King's Landing	8	3	4
Winterfell	2	1	1
Lannisport	6	1	3
Meereen	12	1	6
Volantis	12	1	6
#	40	7	20

Number of states for errand boys  $= 8^4 * 2^1 * 6^3 * 12^6 * 12^6$   
 Number of states for dragons  $= 7^3$   
 Number of states for 30 packages  $= 40^{30}$

The number of possible different states (Size of the state space):  
 $statespacesize = (8^4 * 2 * 6^3 * 12^6 * 12^6) * 7^3 * (40^{30})$   
 $statespacesize = 6.239 * 10^{69}$

Traverse time needed to visit all  $6.239 * 10^{69}$  states:  
 $t = 6.239 * 10^{69} * 10^{-6}s$   
 $t = 6.239 * 10^{63}s$

## 1.2 Exercise 1.2

1. What's the importance of AI Planning in natural language processing/generation?
2. ?